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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,857	02/25/2002	Jan Weber	S13.12-0128	6210

38356 7590 10/17/2006

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EXAMINER

BUI, VY Q

ART UNIT	PAPER NUMBER
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3734

DATE MAILED: 10/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.



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WEBER, JAN

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PAPER

20061003

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Commissioner for Patents

10/03/2006

Vy Q. Bui
Primary Examiner
Art Unit: 3734

DETAILED ACTION

The applicant did not provide any argument regarding the rejections under 35 U.S.C. 103(a) after "Non Final Rejection" (paper 5/16/2005) and after "Final Rejection" (paper 11/23/2005). However, after "Final Rejection", the applicant's Attorney has raised too many new arguments for the Board of Patent and Appeals and Interferences to consider.

In the "Appeal Brief" (paper 3/24/2006), the applicant argued about the rejections under 35 U.S.C. 103(a) for the first time. The arguments raised in the "Appeal Brief" (3/24/2006) were addressed in the "Examiner's Answer" (paper 6/15/2006).

Again, the applicant raised new arguments in the "Appellant's Reply Brief" (07/10/2006). However, the "Reply Brief" has been considered, entered and responded as presented below.

The application has been forwarded to the Board of Patent Appeals and Interferences for decision on the appeal.

Response to Arguments

Applicant's arguments filed 7/10/2006 have been fully considered but they are not persuasive.

I. Response to applicant's argument regarding 102(e) rejection as anticipated by Garibaldi-6,364,823:

Claim 1: " (Previously presented) A vascular treatment device, comprising: a stent formed with a magnetically susceptible material having a magnetic susceptibility that decreases within a preselected temperature range."

As to claim 1, Garibaldi-'823 (col. 8, lines 57-61) teaches a stent formed by magnetic patches 120, which are made from a highly flexible material such as silicone or polyurethane or a bioadsorbable material (col. 7, line 65 to col. 8, line 2), which stent can be adsorbable overtime by the body (col. 8, lines 59-61) and hoop 122 made of nitinol or some other structure or construction (col. 8, lines 6-9) and a magnetic responsive material (col. 8, lines 12-14).

It is not deniable that Garibaldi-'823 teaches a stent including magnet material for easy manipulation when the stent is deployed inside a patient body.

It is not deniable that a magnetic material, inherently must has an associated Curie temperature (Curie temperature T is defined as a temperature of a ferromagnetic material M , which above the temperature T , the ferromagnetic material M will lose its ferromagnetism, see Garibaldi-'823: col. 13, lines 18-20).

Because Garibaldi-'823 stent has a magnetic material, therefore, at a temperature range of about the Curie temperature of the magnetic material, inherently, Garibaldi-'823 stent must decrease its magnetic susceptibility as recited in claim 1.

Notice that claim 1 essentially does not require anything further than a stent formed with a magnetically susceptible material.

Claim 20: “(Original) A vascular treatment system, comprising:

an electromagnetic field generator; and

a medical device deliverable to a treatment site and including a magnetically susceptible material being magnetically susceptible to an electromagnetic field generated by the generator and having a Curie temperature in a pre-selected temperature range, such that the implantable device heats to a temperature sufficient to treat the treatment site when the electromagnetic field is applied.”

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As to independent claim 20, the applicant admitted that heat is generated when a magnetic field is applied to the Garibaldi-'823 stent formed of patches 120, but argued that the generated heat is **not sufficient** to treat a treatment site of a patient.

However, independent claim 20 **does not** specify how much heat is sufficient and how much heat is insufficient. Therefore, it is impossible for one of ordinary skill in the art to recognize the difference between the present claimed invention and the Garibaldi-'823 device.

II. Response to applicant's argument regarding **103(a) rejection** of claims 8, 11, 26 and 29 as obvious over Garibaldi-6,364,823:

As to claims 8, 11, 26 and 29, the applicant (Appellant's Reply Brief, page 16, paragraph 3) argued that Gadolinium is a malleable and ductile material that cannot possess the proper **elastic properties** to provide the function required by hoop 122 of Nitinol, for example, as disclosed by Garibaldi-'823..

However, it is well known that a Gadolinium is as elastic as nitinol because they have very similar modulus of elasticity. Indeed, the modulus of Gadolinium is about 75.8 Gpa (see page 1 of 4 of attachment) in comparison with that of Nitinol (about 75Gpa in austenite state or super-elastic state; see page 2 of 4 of attachment). Notice that in a martensite state, Nitinol is more ductile because the modulus of elasticity of Nitinol is only about 40 Gpa (page 2 of 4 of attachment), but still more elastic than lead, which has a modulus of elasticity of about 13.8 Gpa (see page 4 of 4 of attachment).

It is convincing that one can substitute a Gadolinium for an austenitic Nitinol because both the materials have equivalent modulus of elasticity.

III. Response to applicant's argument regarding 103(a) rejection of claim 12 as obvious over Garibaldi-6,364,823:

As to claim 12, the applicant (Appellant's Reply Brief, page 16, paragraph 3) argued that it is not obvious to use ferrite oxide (FeO) or chromium oxide (CrO) in place of gadolinium as a magnetically susceptible material.

Because gadolinium and ferrite oxide and chromium oxide are well-known materials. It would be within level of one of ordinary skill in the art to use a ferrite oxide or a chromium oxide in a device such as Garibaldi-'823 device as long as a substitute of a ferrite oxide or a chromium oxide does not destroy the function of the device.

IV. Response to applicant's argument regarding 103(a) rejection of claim 28 as obvious over Garibaldi-6,364,823 and Doscher-6,786,904:

As to claim 28, the applicant (Appellant's Reply Brief, page 19, paragraphs 2-3) argued that there is no motivation to combine Garibaldi-'823 and Doscher-'904.

Notice that Doscher-'904 teaches using a magnetic field as disclosed in US Pat. 6,238,421 to generate heat to a partial coating of a magnetically susceptible material of a stent which is implanted to treat an inner surface of a blood vessel of a patient more effectively (Doscher-'904: col. 10, lines 59-67). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a Doscher-'904 stent partially coated for an effective treatment of the inner surface of the patient blood vessel.

Further, Garibaldi-'823 discloses a stent including a magnetically susceptible material implanted in a blood vessel. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a Garibaldi-'823 having a partial coat of a susceptible material

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so that one can effectively direct the heat source generated by a magnetic field to an inner surface of a blood vessel.

V. Response to applicant's argument regarding 103(a) rejection of claims 44, 45, 48 and 49 as obvious over Garibaldi-6,364,823:

Garibaldi-'823 (col. 8, lines 2-15; Fig. 10-12) discloses hoop 122 of nitinol and outer layer/coating having iron particles as a magnet material. Garibaldi-'823 discloses a layer/coating of iron particles. Garibaldi-'823 does not disclose the layer/coating is sintered or painted. However, the manner of making the layer/coating will be given more patentability in a method claim.

VI. Response to applicant's argument regarding 103(a) rejection of claims 42 and 46 as obvious over Garibaldi-6,364,823:

The rejection of independent claims 1 and 20 are proper as indicated above. Therefore, the rejection 103(a) of the claims 42 and 46 are also appropriate.

Conclusion

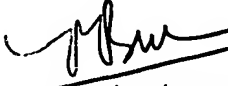
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vy Q. Bui whose telephone number is 571-272-4692. The examiner can normally be reached on Monday-Tuesday and Thursday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Hayes can be reached on 571-272-4959. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Attachment: 4 reference pages


10/03/2006
Vy Q. Bui
Primary Examiner
Art Unit 3734